Legislative Assembly
Province of British Columbia

OMBUDSMAN

8 Bastion Square
Victoria
British Columbia
V8W 1H9
Telephone: (604) 387-5855
Long Distance:
(toll free) 800-742-6157
RAPICOM 387-0198

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AQUACULTURE: A DISCUSSION PAPER

Introduction

Aquaculture, ("the cultivation of finfish, shellfish and aquatic plants in fresh or saltwater") presents exciting yet potentially controversial challenges as one of British Columbia's newest industries. The rapid growth of aquaculture, centred mostly around the practice of rearing salmon in net-pens located primarily in sheltered bays, has surprised many people.

The aquaculture industry may hold great promise for the future of British Columbia's coastal economy. However, this office takes no position on the merits of aquaculture, which involves social and economic policy beyond the mandate provided by the Ombudsman Act. The principal concern to the Ombudsman's office is administrative fairness, which deals with the manner by which government policy is administered to individuals, including corporations, in our society.

The Ombudsman Act, s. 10, authorizes investigation of a decision, recommendation, act, omission, or procedure used by an authority (Ministries and agencies of the Province) "that aggrieves or may aggrieve a person". S. 22 of the Act sets out a code of administrative fairness by which the elements referred to in s. 10 can be measured. S. 22 is a guide for the broad assessment of acts or omissions; in specific instances, the principles of administrative law and practice must be applied, within the context of thorough investigation, the consideration of all perspectives and reasonableness. These principles may include a clear statutory foundation from which administrative policy is derived; a structured framework

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for the exercise of discretion to ensure consistency and certainty; a process for the meaningful participation of interested parties in decision making that affects vital interests; and internal and external review procedures which respect the requirements of due process.

This report is one element of a two part process currently being undertaken by the Ombudsman's office. The first component deals with investigation of specific complaints brought by individuals with respect to the practice of salmon farming and its regulation by provincial ministries. Federal involvement, while beyond the mandate of this office, is relevant to provincial dealings with federal agencies. The individual investigations are in progress.

The second component is a systems study of aquaculture regulation and administrative process of which this discussion paper is a part. This study reflects a preventive approach to administrative fairness, and has as its goal the creation of constructive recommendations which will enhance the fairness of the administration of coastal land tenures and aquaculture practice, to the benefit of those who use, share, and allocate coastal lands and waters.

The Complaints

An overview of the common elements of the individual complaints is useful to understand the range of concerns which provided the impetus for this wider study. They have come primarily from coastal residents, who have voiced a number of concerns, which include the following allegations:

a) they have had little or no meaningful input into the decision-making process by which land tenures for aquaculture are granted;

b) salmon farms interfere with marine navigation and with recreational water use; in addition, fish farms are stationary objects of considerable size, occupying the surface of the water, and as such destroy the formerly unspoiled beauty of coastal waters. Related to this aesthetic issue is the perceived impact on residential land values;

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c) fish farms will have potentially devastating effects on local ecologies. Fish food and feces will destroy bottom-dwelling organisms and attract undesirable species of predators. Neighbouring shorelines are being fouled and made unsuitable for recreational activity as a result of effluent and/or fish feed residue;

d) antibiotics and/or hormone products used in fish feed will find their way into the food chain with potentially serious consequences;

e) local communities have insufficient power and inadequate mechanisms to deal with provincial initiatives which may accelerate intrusion by an industry which enjoys the benefits of provincial support and land allocation.

Aquaculture Regulation at Present

The House Research Agency of the Alaska State Legislature, in a briefing paper entitled "Aquaculture in Alaska", dated February, 1987, stated "The free-for-all atmosphere of salmon farm growth in British Columbia has all the appearances of the typical boom and bust cycle of uncontrolled development." Former lawyer, now aquaculture entrepreneur, Brent Tynan, in the introduction to his paper "Aquaculture - Unravelling the Red Tape: Leases, Licences and Law", presented in October, 1987, stated "An overview of aquaculture law in 1986 is like looking for laws concerning aviation around the time of the Wright Brothers."

Although these statements may have an element of truth, they can also be misleading. Aquaculture in B.C. is not uncontrolled, nor are laws which would apply to it non-existent. Tynan also states that aquaculturists "must contend with a myriad of governmental and statutory regulations and procedures". This appears to be an accurate statement.

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Primary among the aquaculture regulators is the Ministry of Forests and Lands, Lands Division, acting under the authority of the Land Act. However, the Land Act does not mention aquaculture and there are, to date, no Land Act Regulations directed specifically at aquaculture. The Lands Division dictates procedures by way of guidelines set out in the Land Administration Manual. These guidelines govern grants of aquatic Crown Land by way of licence or long-term lease (normally 10 years). The guidelines do not have the force of legislation.

Because of the overlapping jurisdiction of other ministries to control certain aspects of aquaculture, a referral process is employed by which details of proposed salmon farming operations are relayed to these other ministries for comment. The referral process can be seen, through directives from land division, to be undergoing continual refinement; interest groups and local government are now among the referral agencies.

The Ministry of Agriculture and Fisheries has been formally designated "lead ministry" and has responsibility for reviewing and commenting on fish farm production plans. It also provides technical information on aquaculture, and has undertaken a number of initiatives aimed at the promotion of orderly growth of the aquaculture industry. From the beginning, Agriculture and Fisheries has been a primary referral ministry; other referral ministries include Environment and Parks, Health, and, to a lesser degree, Municipal Affairs, and Economic Development.

Apparently, no provincial agency other than the Lands Division has veto power over an application. Comments by Federal referral agencies are given considerable weight. Fisheries and Oceans has the mandate to protect fish habitats under the Federal Fisheries Act. The Coast Guard has the closest to an absolute veto by its power to declare a proposed floating structure to be a potential hazard to coastal navigation under the Navigable Waters Protection Act. It should be noted that restrictions imposed by other agencies do not affect the power of the Lands Division to issue a tenure. However, such tenure is

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granted subject to development restrictions which may be imposed by Federal or local authorities. One of the ostensible purposes of the present referral system is to identify areas in which such restrictions will be imposed and to advise the applicant accordingly, to prevent wasted effort.

Discussion of Issues: An Approach

The purpose of this paper is to stimulate an open and thorough discussion of all issues which are within the mandate of this office. The issues have been formulated in the form of questions. As presented, they do not compose an exhaustive survey of the issues; it is anticipated that more will come to light. At the same time, some current concerns may ultimately prove to be irrelevant. It is recognized that ministry and cross-ministry initiatives are in progress, all of which this office and other concerned parties may not be aware. For the office of the Ombudsman, this paper is the basis of an information-gathering exercise intended to enhance the quality of its ultimate findings.

It is important to recognize that this office is not attempting to duplicate matters that were the subject of the 1986 Gillespie inquiry into finfish aquaculture. However, implementation of the recommendations of that inquiry does not necessarily preclude further examination by this office. The Ombudsman's Office has the narrow focus of administrative fairness, while the Gillespie inquiry was more broadly directed to include social and economic policy concerns. Above all, this office seeks to be constructive in its involvement. The dedication of ministry personnel in attempting to achieve an equitable balancing of interests in the regulation of this new and challenging industry is noted. As well, considerable study and experience has accumulated from other jurisdictions, the aquaculture industry, the Federal government and the universities. This office is in the process of acquiring and reviewing this material and opinion so that questions of administrative fairness can be answered in a realistic way.

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The issues which follow are divided into three broad categories: the land allocation process; conflict resolution; and environmental and health impact.

ISSUES

A. The Land Allocation Process

1. The Land Act was not drafted specifically to deal with unique problems of coastal (aquatic) lands:

   a) How, if at all, should the Act be updated?

   b) Should a separate Aquaculture Act be created?

   c) Should aquaculture be treated as simply one application of coastal resources, and placed within a framework of integrated coastal resource management?

2. The Land Act is administered primarily through a series of directives found in the Land Administration Manual. The Ministry of Forests and Lands does not consider itself absolutely bound by these guidelines:

   a) Should the general procedures in the manual be codified by way of regulation?

   b) Should the portions of the Land Administration manual dealing with aquaculture be codified by way of an Aquaculture Act, and regulations?

Alternatively,

   c) Should the provisions of the manual be made public as official Ministry policy?

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3. Is the process for acquisition of rights of occupation (licence or lease) fair?

   a) Does it provide for adequate participation by interested parties?

   b) Is the participation meaningful?

   c) Do any parties (including referral agencies) have a "veto" power over or a formal opportunity to oppose applications for Crown lands?

   d) Should such a "veto" power or a formal opportunity to oppose be available? If so, to whom should it be provided and under what conditions might it be exercised?

   e) Should public hearings be mandatory for aquatic land applications?

   f) What level of publication of applications should be required? Should the level, or extensiveness of advertising vary with the estimated population within a particular distance of the intended site?

   g) Should approval of an aquatic lands application be made by an independent, inter-ministerial body?

4. Although the Ministry of Agriculture and Fisheries is designated lead agency for aquaculture development, it is apparent that what a fish farm primarily needs is aquatic land in which to conduct its business. By virtue of its power to grant rights of occupation of Crown land, Forests and Lands appears to be, for practical purposes, the lead agency.

   With this in mind:

   a) Should Forests and Lands have exclusive jurisdiction to grant rights of occupation to aquatic lands?

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b) Should the "highest and best use" concept (as used in the Land Administration Manual) be the principal criterion in the allocation of aquatic lands, or should the ultimate land use be the decision of:

   i) local government, in accordance with municipal plans?

   ii) a coastal resource committee, composed of Provincial and Federal ministry representatives, along with representatives of various local communities and interest groups?

   iii) other possibilities? (e.g. inter-Ministerial body per A.3.(g) above.)

c) Should Forests and Lands be removed from jurisdiction over shoreline lands, to be replaced by a specialized coastal resource management ministry?

d) Is Forests and Lands involved in an internal conflict in its role as allocator of Crown land on one hand, and "rent collector" (including appraisal of lands for rent) on the other? In other words, might the maximization of commercial activity ("diligent use") or revenue be adverse to the interests of the province in protecting coastal resources (e.g. coastal wilderness, fishing grounds, tourist areas, etc.)?

5. To what degree should administrative discretion play a role in land allocation?

   a) How should this discretion be structured to ensure consistent and fair application without fettering decision making?

6. Might other systems of coastal land allocation be used as models for revision of the land allocation process in B.C.?

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a) To what extent are elements of other models transferable?

b) Are these elements needed in B.C.?

7. To what extent is "coastal resource management" (C.R.M.) i.e., an integrated strategic planning process for the entire coast of B.C., necessary as a foundation for equitable coastal land allocation (C.L.A.)? What is the practical relationship between C.R.M. and C.L.A.?

8. To what extent do coastal communities (landowners, municipalities, regional districts, etc.) have control over coastal land use, including aquatic lands?

a) Is zoning an adequate tool for the self-determination of communities?

b) Is zoning power as it presently exists adequate in law to serve the needs of coastal communities?

c) Does the grant of a land tenure for Aquaculture amount to de facto re-zoning of lands for commercial or industrial purposes where neighbouring areas are predominantly residential or undeveloped?

d) In areas where strong resistance to Aquaculture remains after establishment of facilities (e.g., net pens) should the tenure be renewed? Should it be declared a non-conforming use, and if so, what will the implications of such a declaration be upon expiry of the existing tenure?

e) Should Aquaculture sites have a limited life - i.e., if used for 10 years, should the site then "lie fallow" for 10 years (see C. Environmental Impact, supra.)?

f) To what extent should local priorities govern Aquaculture siting and development?

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g) What type of system would best provide for co-operative strategic planning between communities and provincial ministries?

h) Does the Coastal Resource Identification Survey (C.R.I.S.) meet this objective (co-operative strategic planning)? What are its strengths? Its weaknesses? Is it a definitive reference?

9. Should criteria employed in allowing assignment (transfer) of tenures, e.g., from private to corporate ownership, be codified?

a) To what extent does discretion play a role in the authorization of transfers? How should this discretion be structured?

10. Does Coastal Resource, or Coastal Zone, Management ("C.R.M.", or "C.Z.M.") exist in B.C.?

a) To what extent?

b) Is it informal, or based on inter-ministerial agreement?

c) Does it have a basis in statute or regulation?

d) Has C.R.M. or C.Z.M. been proposed in the past? In what forms was it contemplated?

e) If no integrated C.R.M. or C.Z.M. exists in B.C., why not? What are the arguments against integrated C.R.M.?

f) What are the potential benefits of integrated C.R.M. or C.Z.M.? What are the potential costs?

g) Is integrated C.R.M. an efficient mechanism for reconciling development and conservation strategies?

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B. Conflict Resolution

1. To what extent is planning effective in conflict avoidance?

   a) Is the present level of provincial planning adequate to allow discussion and planning on the community level? Have the C.R.I.S. studies aided in the planning process, and in providing meaningful public participation in the planning process?

2. Is the present appeal system under the Land Act adequate?

   Land Act, Section 59, sets out:

   - Minister may allow an appeal by a person interested if he considers it advisable;
   - an employee of Lands Ministry, designated by Minister, director, or commissioner may hear appeal;
   - a further appeal exists to B.C. Supreme Court, if filed within 30 days, on a question of law only;
   - there exists a further appeal to B.C. Court of Appeal (law only), with leave of a justice of the Court of Appeal.

3. Should the appeal system be separate and independent from the Ministry of Forests and Lands?

4. What should be the jurisdiction of an appeal body?

   a) Questions of law?

   b) Questions of disputed fact? (e.g. discharge of effluent)

   c) Questions of policy, with authority to hear evidence re desires of the community?

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5. Should priorities for development and conservation of coastal and aquatic lands be set out by statute? .

6. Is the present referral system the best mechanism for providing meaningful participation by all affected or interested parties?

7. What remedies are available to a person who puts forward a grievance after a land tenure has been issued?

8. What is the future of Aquaculture? How do projections for the future affect administrative policy and procedures?

   - Will fish farms be land-based? Will such a development lessen residential and environmental concerns?

   - Will they locate on open ocean? (i.e., more than 1 km. from shore)

   - Does technology offer hope for the reduction or elimination of those elements which adversely affect coastal residents (i.e., effluent, offal, visual impact, noise, navigation hazards, occupation of recreational or wilderness waters, etc.)?

   - Is pen rotation or mandatory "off-shore" siting a viable solution to coastal conflicts?

C. <u>Environmental Impact/Health</u>

1. Should regulations be created governing:

   - Acceptable noise levels (hours of operation, generator muffling, etc.)?

   - Visual impact criteria?

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2. Should environmental impact statements (E.I.S.) be required in areas with borderline acceptability for Aquaculture? If so, what criteria should be in place to determine threshold requirements for an E.I.S.?

3. Should net antifoulants such as TBT be banned by regulation? Do other commercial enterprises utilize TBT? (e.g. paint products for commercial boats and ferries, etc.) Should such a ban cover all aquatic activities rather than simply Aquaculture?

4. Are present, and proposed, waste management regulations adequate to protect:

   a) The Aquaculture industry?

   b) The public (consumers of finfish and shellfish)?

   c) Coastal lands and waters?

5. Should antibiotics and hormones used in Aquaculture (whether by way of direct treatment, water treatment, or inclusion in feed) be more extensively regulated?

   a) What standards exist at present? How does Federal legislation intersect with provincial legislation? Is the legislation at each level adequate?

   b) Do these substances pose any threat to human health?

   c) Might widespread antibiotic use encourage the development of untreatable pathogens?

   d) What is the effect of such substances on "the food chain"?

   e) What further study is needed?

6. Should "farm fish" be required to be so identified at the point of sale? (as opposed to "wild fish")

7. Should predator control measures by fish farms be subject to greater regulation and monitoring? (e.g., killing of otters, eagles, herons, etc.)

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a) Does existing provincial legislation (e.g., Wildlife Act) adequately address this issue?

b) Can it be adequately enforced?

c) Are provincial controls coordinated with Federal legislation (e.g. Migratory Birds Convention Act, Federal Fisheries Act)

8. Should standards be developed to assess accurately the impact of Aquaculture on adjoining waters and lands? (e.g., Floating residues, waste accumulation, etc.)

a) At what level of impact should an Aquaculture facility be forced to take corrective measures?

b) Should stocking density of net pens be regulated? What is the relationship between stocking density and environmental impact?

9. Are environmental and economic challenges simply opposite sides of the same coin? (Consider the following quotes)

"Conservation strategies are essential components of broad based economic development strategies." Honourable David Porter, Minister of Renewable Resources, Yukon

"Environmental conservation and economic development not only can co-exist, they must co-exist, for one is a condition of the other." Dr. Donald Chant, Chairman and President, Ontario Waste Management Corporation

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